SEQUENCE LISTING

```
<110> INCYTE PHARMACEUTICALS, INC.
      TANG, Y. Tom
      YUE, Henry
      BAUGHN, Mariah R.
     HILLMAN, Jennifer L.
     LAL, Preeti
      AU-YOUNG, Janice
      YANG, Junming
     LU, Dyung Aina M.
      AZIMZAI, Yalda
<120> NEURON-ASSOCIATED PROTEINS
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<141> Herewith
<150> 09/210,083; unassigned; 60/119,365; 60/124,687
<151> 1998-12-11; 1998-12-11; 1999-02-09; 1999-03-16
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Pro Leu Leu Cys Leu Phe Leu Gln Gly Ala Thr Ala Val Leu Phe
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Ala Val Phe Val Arg Tyr Asn His Lys Thr Asp Ala Ala Leu Trp
                                     40
His Arg Ser Asn His Ser Asn Ala Asp Asn Glu Phe Tyr Phe Arg
                 50
Tyr Pro Lys Glu Ser His Ser Val Ala Gln Ala Gly Val Gln Arg
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Arg Asn Leu Gly Ser Leu Gln Pro Ser Pro Pro Arg Trp Ser Phe
                                                          90
                                     85
                 80
Ala Leu Val Ala Gln Ala Gly Val Gln Trp His Asn Leu Gly Ser
                 95
                                    100
Pro Gln Pro Leu Pro Pro Gly Phe Lys Arg Phe Ser Cys Leu Ser
                                     115
                110
Leu Leu Ser Ser Trp Asp Tyr Ser Leu Glu Ser Val Phe Pro Leu
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125
                                                         135
                                    130
Ile Ala Glu Gly Gln Arg Ser Ala Thr Ser Gln Ala Met His Gln
                                    145
                140
Leu Phe Gly Leu Phe Val Thr Leu Met Phe Ala Ser Val Gly Gly
                                    160
                155
Gly Leu Gly Gly Leu Leu Leu Lys Leu Pro Phe Leu Asp Ser Pro
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Pro Arg Leu Pro Ala Leu Arg Gly Pro Ser Ser Leu Ala Gly Ala
Trp Arg Ala
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Glu Glu Lys Arg Leu Met Val Glu Leu His Asn Leu Tyr Arg Ala
                                     40
                 35
Gln Val Ser Pro Thr Ala Ser Asp Met Leu His Met Arg Trp Asp
                                     55
                 50
Glu Glu Leu Ala Ala Phe Ala Lys Ala Tyr Ala Arg Gln Cys Val
                 65
                                     70
Trp Gly His Asn Lys Glu Arg Gly Arg Gly Glu Asn Leu Phe
                                     85
Ala Ile Thr Asp Glu Gly Met Asp Val Pro Leu Ala Met Glu Glu
                                    100
Trp His His Glu Arg Glu His Tyr Asn Leu Ser Ala Ala Thr Cys
                                    115
                110
Ser Pro Gly Gln Met Cys Gly His Tyr Thr Gln Val Val Trp Ala
                                    130
                125
Lys Thr Glu Arg Ile Gly Cys Gly Ser His Phe Cys Glu Lys Leu
                                    145
                140
Gln Gly Val Glu Glu Thr Asn Ile Glu Leu Leu Val Cys Asn Tyr
                                    160
Glu Pro Pro Gly Asn Val Lys Gly Lys Arg Pro Tyr Gln Glu Gly
Thr Pro Cys Ser Gln Cys Pro Ser Gly Tyr His Cys Lys Asn Ser
                                    190
                185
Leu Cys Glu Pro Ile Gly Ser Pro Glu Asp Ala Gln Asp Leu Pro
                                    205
                200
Tyr Leu Val Thr Glu Ala Pro Ser Phe Arg Ala Thr Glu Ala Ser
                                    220
                215
Asp Ser Arg Lys Met Gly Thr Pro Ser Ser Leu Ala Thr Gly Ile
                                    235
Pro Ala Phe Leu Val Thr Glu Val Ser Gly Ser Leu Ala Thr Lys
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245
                                    250
Ala Leu Pro Ala Val Glu Thr Gln Ala Pro Thr Ser Leu Ala Thr
                260
                                    265
Lys Asp Pro Pro Ser Met Ala Thr Glu Ala Pro Pro Cys Val Thr
                                    280
                275
Thr Glu Val Pro Ser Ile Leu Ala Ala His Ser Leu Pro Ser Leu
                                    295
                290
Asp Glu Glu Pro Val Thr Phe Pro Lys Ser Thr His Val Pro Ile
                                    310
                305
Pro Lys Ser Ala Asp Lys Val Thr Asp Lys Thr Lys Val Pro Ser
                                    325
                320
Arg Ser Pro Glu Asn Ser Leu Asp Pro Lys Met Ser Leu Thr Gly
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                335
Ala Arg Glu Leu Leu Pro His Ala Gln Glu Glu Ala Glu Ala Glu
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                350
Ala Glu Leu Pro Pro Ser Ser Glu Val Leu Ala Ser Val Phe Pro
                                    370
Ala Gln Asp Lys Pro Gly Glu Leu Gln Ala Thr Leu Asp His Thr
                380
Gly His Thr Ser Ser Lys Ser Leu Pro Asn Phe Pro Asn Thr Ser
                395
                                    400
Ala Thr Ala Asn Ala Thr Gly Gly Arg Ala Leu Ala Leu Gln Ser
                                    415
Ser Leu Pro Gly Ala Glu Gly Pro Asp Lys Pro Ser Val Val Ser
                                    430
                425
Gly Leu Asn Ser Gly Pro Gly His Val Trp Gly Pro Leu Leu Gly
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Leu Leu Leu Pro Pro Leu Val Leu Ala Gly Ile Phe
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Val Pro Ser Ala Pro Pro Ser Tyr Glu Glu Ala Thr Ser Gly Glu
                 35
Gly Met Lys Ala Gly Ala Phe Pro Pro Ala Pro Thr Ala Val Pro
                 50
                                     55
Leu His Pro Ser Trp Ala Tyr Val Asp Pro Ser Ser Ser Ser
                                     70
Tyr Asp Asn Gly Phe Pro Thr Gly Asp His Glu Leu Phe Thr Thr
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Phe Ser Trp Asp Asp Gln Lys Val Arg Arg Val Phe Val Arg Lys
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Val Tyr Thr Ile Leu Leu Ile Gln Leu Leu Val Thr Leu Ala Val
                                    115
Val Ala Leu Phe Thr Phe Cys Asp Pro Val Lys Asp Tyr Val Gln
                                    130
                125
Ala Asn Pro Gly Trp Tyr Trp Ala Ser Tyr Ala Val Phe Phe Ala
                                    145
Thr Tyr Leu Thr Leu Ala Cys Cys Ser Gly Pro Arg Arg His Phe
                                    160
                155
Pro Trp Asn Leu Ile Leu Leu Thr Val Phe Thr Leu Ser Met Ala
                                    175
                170
Tyr Leu Thr Gly Met Leu Ser Ser Tyr Tyr Asn Thr Thr Ser Val
                                    190
                185
Leu Leu Cys Leu Gly Ile Thr Ala Leu Val Cys Leu Ser Val Thr
                                    205
                200
Val Phe Ser Phe Gln Thr Lys Phe Asp Phe Thr Ser Cys Gln Gly
                                    220
                215
Val Leu Phe Val Leu Leu Met Thr Leu Phe Phe Ser Gly Leu Ile
Leu Ala Ile Leu Leu Pro Phe Gln Tyr Val Pro Trp Leu His Ala
                245
                                    250
Val Tyr Ala Ala Leu Gly Ala Gly Val Phe Thr Leu Phe Leu Ala
                                    265
                260
Leu Asp Thr Gln Leu Leu Met Gly Asn Arg Arg His Ser Leu Ser
                                    280
                275
Pro Glu Glu Tyr Ile Phe Gly Ala Leu Asn Ile Tyr Leu Asp Ile
                                    295
                290
Ile Tyr Ile Phe Thr Phe Phe Leu Gln Leu Phe Gly Thr Asn Arg
                                    310
                305
Glu
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Gly Thr Glu Gln Glu Thr Ala Thr Pro Glu Asn Gly Ile Val Lys
Ser Glu Ser Leu Asp Glu Glu Glu Lys Leu Glu Leu Gln Arg Arg
Leu Glu Ala Gln Asn Gln Glu Arg Arg Lys Ser Lys Ser Gly Ala
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Gly Lys Gly Lys Leu Thr Arg Ser Leu Ala Val Cys Glu Glu Ser
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Ser Ala Arg Pro Gly Gly Glu Ser Leu Gln Gly Gln Thr Leu
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                                     25
Cys Ala Val Arg Ala His Gly Asp Pro Val Ser Glu Ser Phe Val
                                     40
                 35
Gln Arg Val Tyr Gln Pro Phe Leu Thr Thr Cys Asp Gly His Arg
                                     55
                 50
Ala Cys Ser Thr Tyr Arg Thr Ile Tyr Arg Thr Ala Tyr Arg Arg
                                     70
                 65
Ser Pro Gly Leu Ala Pro Ala Arg Pro Arg Tyr Ala Cys Cys Pro
                                     85
Gly Trp Lys Arg Thr Ser Gly Leu Pro Gly Ala Cys Gly Ala Ala
                                     100
Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln Pro
                                    115
Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln
                                    130
                125
Ser Asp Val Asp Glu Cys Ser Ala Arg Arg Gly Gly Cys Pro Gln
                                    145
                140
Arg Cys Val Asn Thr Ala Gly Ser Tyr Trp Cys Gln Cys Trp Glu
                                    160
                155
Gly His Ser Leu Ser Ala Asp Gly Thr Leu Cys Val Pro Lys Gly
                                     175
                170
Gly Pro Pro Arg Val Ala Pro Asn Pro Thr Gly Val Asp Ser Ala
                                    190
                185
Met Lys Glu Glu Val Gln Arg Leu Gln Ser Arg Val Asp Leu Leu
                                     205
                200
Glu Glu Lys Leu Gln Leu Val Leu Ala Pro Leu His Ser Leu Ala
                                     220
                215
Ser Gln Ala Leu Glu His Gly Leu Pro Asp Pro Gly Ser Leu Leu
                                     235
                230
Val His Ser Phe Gln Gln Leu Gly Arg Ile Asp Ser Leu Ser Glu
                                     250
                245
Gln Ile Ser Phe Leu Glu Glu Gln Leu Gly Ser Cys Ser Cys Lys
                                                         270
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Lys Asp Ser
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                 20
Arg Val Glu Val Ser Gly Asp Ala Ser Cys Cys Ser Pro Asp Pro
                 35
                                     40
Ile Ser Pro Glu Asp Leu Pro Arg Gln Val Glu Leu Leu Asp Ala
                                     55
Val Ser Gln Ala Ala Gln Lys Tyr Glu Ala Leu Tyr Met Gly Thr
                 65
Leu Pro Val Thr Lys Ala Met Gly Met Asp Val Leu Asn Glu Ala
                                     85
                 80
Ile Gly Thr Leu Thr Ala Arg Gly Asp Arg Asn Ala Trp Val Pro
                 95
                                    100
Thr Met Leu Ser Val Ser Asp Ser Leu Met Thr Ala His Pro Ile
                                    115
                110
Gln Ala Glu Ala Ser Thr Glu Glu Glu Pro Leu Trp Gln Cys Pro
                                    130
Val Arg Leu Val Thr Phe Ile Gly Val Gly Arg Asp Pro His Thr
                                    145
                140
Phe Gly Leu Ile Ala Asp Leu Gly Arg Gln Ser Phe Gln Cys Ala
                                    160
                155
Ala Phe Trp Cys Gln Pro His Ala Gly Gly Leu Ser Glu Ala Val
                170
                                    175
Gln Ala Ala Cys Met Val Gln Tyr Gln Lys Cys Leu Val Ala Ser
                                    190
Ala Ala Arg Gly Lys Ala Trp Gly Ala Gln Ala Arg Ala Arg Leu
                                    205
                200
Arg Leu Lys Arg Thr Ser Ser Met Asp Ser Pro Gly Gly Pro Leu
                215
Pro Leu Pro Leu Leu Lys Gly Gly Val Gly Gly Ala Gly Ala Thr
                                    235
                230
Pro Arg Lys Arg Gly Val Phe Ser Phe Leu Asp Ala Phe Arg Leu
                245
                                    250
Lys Pro Ser Leu Leu His Met Pro
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                                     10
Arg Ala Leu Glu Glu Gln Leu Leu Lys Tyr Ser Pro Asp Pro Val
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25
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Val Val Arg Gly Ser Gly His Val Thr Val Phe Gly Leu Ser Asn
                 35
                                     40
Lys Phe Glu Ser Glu Phe Pro Ser Ser Leu Thr Gly Lys Val Ala
                                     55
                 50
Pro Glu Glu Phe Lys Ala Ser Ile Asn Arg Val Asn Ser Cys Leu
Lys Lys Asn Leu Pro Val Asn Val Arg Trp Leu Leu Cys Gly Cys
                 80
Leu Cys Cys Cys Cys Thr Leu Gly Cys Ser Met Trp Pro Val Ile
                 95
                                    100
Cys Leu Ser Lys Arg Thr Arg Arg Ser Ile Glu Lys Leu Leu Glu
                                    115
                110
Trp Glu Asn Asn Arg Leu Tyr His Lys Leu Cys Leu His Trp Arg
                                    130
Leu Ser Lys Arg Lys Cys Glu Thr Asn Asn Met Met Glu Tyr Val
                                    145
Ile Leu Ile Glu Phe Leu Pro Lys Thr Pro Ile Phe Arg Pro Asp
                                    160
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Gly Tyr Asn Ala Pro His His Pro Phe Ala Gly Tyr Pro Pro Gly
Tyr Pro Met Gln Ala Tyr Val Asp Pro Ser Asn Pro Asn Ala Gly
                 35
Lys Val Leu Leu Pro Thr Pro Ser Met Asp Pro Val Cys Ser Pro
                                     55
                 50
Ala Pro Tyr Asp His Ala Gln Pro Leu Val Gly His Ser Thr Glu
                                      70
Pro Leu Ser Ala Pro Pro Pro Val Pro Val Pro His Val Ala
                                      85
Ala Pro Val Glu Val Ser Ser Ser Gln Tyr Val Ala Gln Ser Asp
                 95
Gly Val Val His Gln Asp Ser Ser Val Ala Val Leu Pro Val Pro
                110
Ala Pro Gly Pro Val Gln Gly Gln Asn Tyr Ser Val Trp Asp Ser
                                    130
                125
Asn Gln Gln Ser Val Ser Val Gln Gln Tyr Ser Pro Ala Gln
                140
                                     145
Ser Gln Ala Thr Ile Tyr Tyr Gln Gly Gln Thr Cys Pro Thr Val
                                     160
Tyr Gly Val Thr Ser Pro Tyr Ser Gln Thr Thr Pro Pro Ile Val
                                     175
                170
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Gln Ser Tyr Ala Gln Pro Ser Leu Gln Tyr Ile Gln Gly Gln Gln
                                    190
                185
Ile Phe Thr Ala His Pro Gln Gly Val Val Gln Pro Ala Ala
                                    205
                200
Ala Val Thr Thr Ile Val Ala Pro Gly Gln Pro Gln Pro Leu Gln
                                    220
                215
Pro Ser Glu Met Val Val Thr Asn Asn Leu Leu Asp Leu Pro Pro
                                    235
Pro Ser Pro Pro Lys Pro Lys Thr Ile Val Leu Pro Pro Asn Trp
                                    250
Lys Thr Ala Arg Asp Pro Glu Gly Lys Ile Tyr Tyr His Val
                                    265
                260
Ile Thr Arg Gln Thr Gln Trp Asp Pro Pro Thr Trp Glu Ser Pro
                                    280
                275
Gly Asp Asp Ala Ser Leu Glu His Glu Ala Glu Met Asp Leu Gly
                                                         300
                                    295
                290
Thr Pro Thr Tyr Asp Glu Asn Pro Met Lys Ala Ser Lys Lys Pro
                                    310
                305
Lys Thr Ala Glu Ala Asp Thr Ser Ser Glu Leu Ala Lys Lys Ser
                                    325
                320
Lys Glu Val Phe Arg Lys Glu Met Ser Gln Phe Ile Val Gln Cys
                                    340
                335
Leu Asn Pro Tyr Arg Lys Pro Asp Cys Lys Val Gly Arg Ile Thr
                                    355
                350
Thr Thr Glu Asp Phe Lys His Leu Ala Arg Lys Leu Thr His Gly
                                    370
Val Met Asn Lys Glu Leu Lys Tyr Cys Lys Asn Pro Glu Asp Leu
                                    385
                380
Glu Cys Asn Glu Asn Val Lys His Lys Thr Lys Glu Tyr Ile Lys
                                    400
                395
Lys Tyr Met Gln Lys Phe Gly Ala Val Tyr Lys Pro Lys Glu Asp
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                                    415
                410
Thr Glu Leu Glu
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Ala Leu Arg Pro Leu Leu Leu Pro Leu Val Leu Leu Pro Pro
                                     25
Leu Ala Ala Ala Ala Gly Pro Asn Arg Cys Asp Thr Ile Tyr
                                     40
Gln Gly Phe Ala Glu Cys Leu Ile Arg Leu Gly Asp Ser Met Gly
                                     55
                 50
Arg Gly Gly Glu Leu Glu Thr Ile Cys Arg Ser Trp Asn Asp Phe
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70
                 65
His Ala Cys Ala Ser Gln Val Leu Ser Gly Cys Pro Glu Glu Ala
                                     85
                 80
Ala Ala Val Trp Glu Ser Leu Gln Gln Glu Ala Arg Gln Ala Pro
                                   100
                 95
Arg Pro Asn Asn Leu His Thr Leu Cys Gly Ala Pro Val His Val
                                    115
                110
Arg Glu Arg Gly Thr Gly Ser Lys Thr Asn Gln Glu Thr Leu Arg
                                    130
Ala Thr Ala Pro Ala Leu Pro Met Ala Pro Ala Pro Pro Leu Leu
                                    145
Ala Ala Leu Ala Leu Ala Tyr Leu Leu Arg Pro Leu Ala
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                155
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His Phe Asp Tyr Pro Arg Leu Ser Gln Gly Phe Leu Leu Asp Tyr
                                      40
                 35
Phe Leu Met Ser Leu Leu Cys Ser Lys Leu Trp Asp Leu Leu Tyr
                                      55
                  50
Lys Leu Arg Phe Val Leu Thr Tyr Ile Ala Pro Trp Gln Ile Thr
                                      70
Trp Gly Ser Ala Phe His Ala Phe Ala Gln Pro Phe Ala Val Pro
                                      85
His Ser Ala Met Leu Phe Val Gln Ala Leu Leu Ser Gly Leu Phe
                                     100
                  95
Ser Thr Pro Leu Asn Pro Leu Leu Gly Ser Ala Val Phe Ile Met
                                     115
                 110
Ser Tyr Ala Arg Pro Leu Lys Phe Trp Glu Arg Asp Tyr Asn Thr
                                     130
                 125
Lys Arg Val Asp His Ser Asn Thr Arg Leu Val Thr Gln Leu Asp
                                     145
Arg Asn Pro Gly Ala Asp Asp Asn Asn Leu Asn Ser Ile Phe Tyr
                                     160
                 155
Glu His Leu Thr Arg Ser Leu Gln His Thr Leu Cys Gly Asp Leu
                                     175
                 170
Val Leu Gly Arg Trp Gly Asn Tyr Gly Pro Gly Asp Cys Phe Val
                                     190
                 185
Leu Ala Ser Asp Tyr Leu Asn Ala Leu Val His Leu Ile Glu Val
                                     205
                 200
Gly Asn Gly Leu Val Thr Phe Gln Leu Arg Gly Leu Glu Phe Arg
                                     220
                 215
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Gly	Thr	Tyr	Cys	Gln 230	Gln	Arg	Glu	Val	Glu 235	Ala	Ile	Thr	Glu	Gly 240
Val	Glu	Glu	Asp		Gly	Cys	Cys	Cys	Cys 250	Glu	Pro	Gly	His	Leu 255
Pro	Arg	Val	Leu		Phe	Asn	Ala	Ala	Phe 265	Gly	Gln	Arg	Trp	Leu 270
Ala	Trp	Glu	Val		Ala	Ser	Lys	Tyr	Val 280	Leu	Glu	Gly	Tyr	Ser 285
Ile	Ser	Asp	Asn		Ala	Ala	Ser	Met	Leu 295	Gln	Val	Phe	Asp	Leu 300
Arg	Lys	Ile	Leu		Thr	Tyr	Tyr	Val	Lys 310	Ser	Ile	Ile	Tyr	Tyr 315
Val	Ser	Arg	Ser		Lys	Leu	Glu	Val	Trp 325	Leu	Ser	His	Glu	Gly 330
Ile	Thr	Ala	Ala	Leu 335	Arg	Pro	Val	Arg	Val 340	Pro	Gly	Tyr	Ala	Asp 345
				350					355				Asp	360
				365					370				His	375
				380					385				Val	390
				395					400				Leu	405
				410					415				Met	420
				425					430				Phe	435
				440					445					Ala 450
				455					460				Arg	465
				470					475					Tyr 480
				485					490					Glu 495 Ala
				500					505					Ala 510
				515					520					Leu 525
				530					535					Arg 540 Arg
				545					550					Arg 555 Asn
				560					565					570 Leu
_				575					580					585 Pro
				590					595					600 Pro
				605	ı				610					615 Ile
				620	ı				625					630 Cys
мта	. nls	TIE	, nen	. net	9				2			4	-	-

640

635

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Gly Ala Gly Cys Asn Ser Gly Gly Asn Val Asp Asp Ser Asp Cys
                650
                                    655
Ser Gly Gly Gly Leu Thr Ser Leu Ser Asn Asn Pro Pro Val
                665
                                    670
Ala His Pro Thr Pro Glu Asn Thr Ala Gly Asn Gly Asp Gln Pro
                                    685
                680
Leu Pro Pro Gly Pro Gly Trp Gly Pro Arg Ser Ser Leu Ser Gly
                                    700
                695
Ser Gly Asp Gly Arg Pro Pro Pro Leu Leu Gln Trp Pro Pro
                                    715
                710
Arg Leu Pro Gly Pro Pro Pro Ala Ser Pro Ile Pro Thr Glu Gly
                                    730
                725
Pro Arg Thr Ser Arg Pro Pro Gly Pro Gly Leu Leu Ser Ser Glu
                                    745
                740
Gly Pro Ser Gly Lys Trp Ser Leu Gly Gly Arg Lys Gly Leu Gly
                                    760
                755
Gly Ser Asp Gly Glu Pro Ala Ser Gly Ser Pro Lys Gly Gly Thr
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Pro Lys Ser Gln Val Arg His Leu Trp Glu Gly Trp Val Pro Glu
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Val Lys Ala Leu Asn Glu Met Trp Lys Cys Gln Asn Met Leu Arg
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                 20
Ile His Val Arg Glu Leu Leu Asp Leu His Lys Gln Pro Thr Ser
                                     40
                 35
Glu Ala Asn Cys Ser Ala Met Phe Gly Lys Leu Met Thr Ile Ala
                 50
Lys Asn Leu Pro Asp Pro Gly Lys Ala Gln Asp Phe Val Lys Lys
                                     70
Phe Asn Gln Val Leu Gly Asp Asp Glu Lys Leu Arg Ser Gln Leu
                                     85
Glu Leu Leu Ile Ser Pro Thr Cys Ser Cys Lys Gln Ala Asp Ile
                                    100
                 95
Cys Val Arg Glu Ile Ala Arg Lys Leu Ala Asn Pro Lys Gln Pro
                                    115
                110
Thr Asn Pro Phe Leu Glu Met Val Lys Phe Leu Leu Glu Arg Ile
                                    130
                125
Ala Pro Val His Ile Asp Ser Glu Ala Ile Ser Ala Leu Val Lys
                                    145
                140
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Leu	Met	Asn	Lys	Ser 155	Ile	Glu	Gly	Thr	Ala 160	Asp	Asp	Glu	Glu	Glu 165
Gly	Val	Ser	Pro	Asp	Thr	Ala	Ile	Arg	Ser	Gly	Leu	Glu	Leu	
Lys	Val	Leu	Ser		Thr	His	Pro	Thr		Phe	His	Ser	Ala	Glu
		_		185	_		_	•	190	34-4-	a3	7 ~ ~	7 00	195
Thr	Tyr	Glu	Ser	Leu 200	Leu	GIn	Cys	Leu	Arg 205	мет	GIU	Asp	ASP	210
Val	Ala	Glu	Ala		Ile	Gln	Ile	Phe		Asn	Thr	Gly	His	Lys
				215					220					225
Ile	Glu	Thr	Asp	Leu	Pro	Gln	Ile	Arg	Ser	Thr	Leu	Ile	Pro	Ile
				230					235	'	-1	.	T	240
Leu	His	Gln	Lys	Ala 245	Lys	Arg	GIY	Thr	250	His	GIN	Ala	гуѕ	255
λla	Val	His	Cvs		His	Ala	Ile	Phe		Asn	Lys	Glu	Val	
AIA	Vai	1115	Cyb	260					265		•			270
Leu	Ala	Gln	Ile	Phe 275	Glu	Pro	Leu	Ser	Arg 280	Ser	Leu	Asn	Ala	Asp 285
Val	Pro	Glu	Gln		Ile	Thr	Pro	Leu		Ser	Leu	Gly	His	Ile
				290					295					300
Ser	Met	Leu	Ala	Pro	Asp	Gln	Phe	Ala		Pro	Met	Lys	Ser	Val
				305		_	_	•	310	14	2	7 ~~	7. ~~	315
Val	Ala	Asn	Phe	11e 320	Val	ьуs	Asp	Leu	ьеu 325	Met	ASII	Asp	Arg	330
Thr	Gly	Glu	Lvs		Glv	Lvs	Leu	Trp		Pro	Asp	Glu	Glu	
1111	GLY	GIU	цур	335	017	-1-			340		•			345
Ser	Pro	Glu	Val	Leu	Ala	Lys	Val	Gln	Ala	Ile	Lys	Leu	Leu	Val
				350			_	_	355	.	•	0	77.	360
Arg	Trp	Leu	Leu	Gly 365	Met	Lys	Asn	Asn	370	Ser	Lys	ser	Ala	375
Ser	Thr	Leu	Arg	Leu 380	Leu	Ser	Ala	Met	Leu 385	Val	Ser	Glu	Gly	Asp 390
Len	Thr	Glu	Gln		Arq	Ile	Ser	Lys		Asp	Met	Ser	Arg	
				395					400					405
Arg	Leu	Ala	Ala	Gly	Ser	Ala	Ile	Met		Leu	Ala	Gln	Glu	Pro
		'		410	-1 -	mb	D	C1. .	415	Dho	Cln	Tau	Cve	420 Ala
Cys	Tyr	His	GIu	11e 425	ire	Thr	PIO	GIU	430	Pile	GIII	Бец	Cys	435
Leu	Val	Ile	Asn		Glu	Cys	Tyr	Gln	Val	Arg	Gln	Ile	Phe	Ala
				440					445					450
Gln	Lys	Leu	His	Lys	Ala	Leu	Val	Lys		Leu	Leu	Pro	Leu	Glu
				455		•	2	70.7	460	7 an	Dwo	V-1	Tare	465
Tyr	Met	Ala	lle	470	Ala	Leu	Cys	Ala	475	Asp	PIO	Val	БуЗ	Glu 480
Arg	Arg	Ala	His	Ala	Arg	Gln	Cys	Leu		Lys	Asn	Ile	Ser	Ile
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Leu	JUL	u		515		- , -			520	4 -				525
Leu	Ala	His	Asp		Asp	Phe	Thr	Arg		Gln	Asp	Val	Asp	Gln
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Leu	Arg	Asp	Ile		Glu	Cys	Leu	Trp	Phe 550	Met	Leu	Glu	val	Leu 555
Mot	ጥኩሎ	Larg	Δας	545	Δen	Aen	Ser	His		Phe	Met	Lvs	Lvs	Met
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Ile Gln Gln Lys Thr Asp Glu Lys Val Asp Glu Ser Gly Pro Pro
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Gln Gly Asn Ala Thr Lys Asn Asp Asp Leu Asn Lys Pro Ile Asn
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			Pro	80					85					90
			Met	95					100					105
			Asp	110					115					120
_			Arg	125					130					135
			Leu	140					145					150
			Lys	155					160					165
	_		Asn Leu	170					175					180
	_		Asn	185					190					195
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	-		Pro	215					220					225
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			Val	245					250					255 Leu
Glu	Leu	Pro	Lys	260 Asp	Gln	Gly	Gly	Leu		Ile	Ala	Ile	Ser	
Glu	Asp	Thr	Leu		Gly	Val	Ile	Ile		Ser	Leu	Thr	Glu	
Gly	Val	Ala	Ala		Asp	Gly	Arg	Leu		Val	Gly	Asp	Gln	300 Ile 315
Leu	Ala	Val	Asp	305 Asp 320	Glu	Ile	Val	Val	310 Gly 325	Tyr	Pro	Ile	Glu	Lys 330
Phe	Ile	Ser	Leu		Lys	Thr	Ala	Lys		Thr	Val	Lys	Leu	
Ile	His	Ala	Glu		Pro	Asp	Ser	Gln		Val	Pro	Ser	Ala	Ala 360
Gly	Ala	Ala	Ser	Gly 365	Glu	Lys	Lys	Asn	Ser 370	Ser	Gln	Ser	Leu	Met 375
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			Ser	395					400					405
-			Ile	410					415					420
_				425					430					Thr 435
Leu	Leu	Gly	Ala	Ile	Ile	Ile	His	Glu	Val	Tyr	Glu	Glu	Gly	Ala

Ala Cys Lys Asp Gly Arg Leu Trp Ala Gly Asp Gln Ile Leu Glu 455 Val Asn Gly Ile Asp Leu Arg Lys Ala Thr His Asp Glu Ala Ile 470 Asn Val Leu Arg Gln Thr Pro Gln Arg Val Arg Leu Thr Leu Tyr 485 Arg Asp Glu Ala Pro Tyr Lys Glu Glu Glu Val Cys Asp Thr Leu Tyr 485 Arg Asp Glu Ala Pro Tyr Lys Glu Glu Glu Val Cys Asp Thr Leu Tyr 500 Thr Ile Glu Leu Gln Lys Lys Pro Gly Lys Gly Leu Gly Leu Ser 515 Ile Val Gly Lys Arg Asn Asp Thr Gly Val Phe Val Ser Asp Ile 530 Asp Gln Ile Leu Met Val Asp Gly Arg Leu Met Gln Gly Val Lys Glu Gly Lys Gly Leu Ser 555 Asp Gln Ile Leu Met Val Asp Gly Gly Arg Leu Met Gln Gly Kal Lys Gly Gly Ile Ala Asp Gly Arg Leu Met Gln Gly Kal					440					445					450
145	Ala	Cvs	Lvs	Asp		Arq	Leu	Trp	Ala		Asp	Gln	Ile	Leu	Glu
470	• • • • • • • • • • • • • • • • • • • •	-1-		•		_		-			_				
Ash Val Leu Arg Gln Thr Pro Gln Arg Val Arg Leu Thr Leu Tyr 485 Arg Asp Glu Ala Pro 500	Val	Asn	Gly	Ile	Asp	Leu	Arg	Lys	Ala	Thr	His	Asp	Glu	Ala	
Arg Arg Slu Ala Pro Tyr Lys Glu Glu Glu Cys Arg Thr Leu Slo Sol Sol Sol Sol Sol Sol Sol Sol Sol													,	_	
Amely Ray Ray Ray Ray Ray Ray Ray Ray Ray Ra	Asn	Val	Leu	Arg		Thr	Pro	Gln	Arg		Arg	Leu	Thr	Leu	
The 11e Glu Leu Glu Lys Lys Pro Gly Lys Gly Leu Gly Leu Gly Leu Gly Leu Gly Leu Gly Leu Asp 752 Ile Val Gly Lys Arg Asp Thr Gly Val Pue Val Leu Asp Asp Gly Val Asp Asp Gly Val Asp Asp Gly Val Asp Asp Leu Me Val Asp Asp Gly Arg Asp	_	_	~1				7	~1	~1		1701	Crra	λαn	Thr	
The He Glu Leu Gln Lys Lys Pro Gly Lys Gly Leu Gly Leu Ser S25	Arg	Asp	GIu	Ala		Tyr	Lys	GIU	GIU		vaı	Cys	Asp	1111	
Signature Sign	Thr	Tla	Glu	Len		Lvs	Lvs	Pro	Glv		Glv	Leu	Glv	Leu	
Name	1111	116	Giu	шец		L y S	2,0		 1		1		- 1		
Val Lys Gly Gly Gly Gly He Asp Asp Asp Gly Asp Leu Met Gly Asp Gly Asp Leu Met Gly Asp Gly Asp Leu Met Gly Asp Gly Asp Val Arg Asp Ala Thr 555 Asp Glu Val Val Ala Ala Leu Leu Ley Cop Ser Leu Gly Thr Val Arg Thr Val Ala Gly Pro Phe Hu Ser Glu Mar Arg Arg Thr Arg Thr Arg Thr Arg Thr Arg Thr Arg	Ile	Val	Gly	Lys		Asn	Asp	Thr	Gly	Val	Phe	Val	Ser	Asp	Ile
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Simple S	Asp	Gln	Ile	Leu		Val	Asn	Gly	Glu		Val	Arg	Asn	Ата	
Thr Leu Glu Val Gly Arg Ile Lys Ala Gly Pro Phe His Ser Glu Glu Glu Glu Ser Glu Glu Gly Ser Glu Gly Ser Leu Geo Glo Glo Gly Ser Glu Gly Gly <td>G1</td> <td>a3</td> <td>710</td> <td>7707</td> <td></td> <td>ח ז ח</td> <td>T 011</td> <td>Ť en</td> <td>Lare</td> <td></td> <td>Ser</td> <td>T.e.11</td> <td>Glv</td> <td>Thr</td> <td></td>	G1	a 3	710	7707		ח ז ח	T 011	Ť en	Lare		Ser	T.e.11	Glv	Thr	
Thr Leu Glu Val Gly Arg Ile Lys Ala Gly Pro Phe His Ser Glu Arg Arg Pro Ser Gln Ser Ser Gln Val Ser Glu Gly Ser Leu Ser Glo 610	GIN	GIU	Ala	vaı		Ala	пеи	Dea	цур		561	пси	O ₁		585
Arg Arg Pro Ser Gln Ser Gln Val Ser Glu Glu Gly Ser Leu Ser Glo	Thr	Leu	Glu	Val		Arq	Ile	Lys	Ala	_	Pro	Phe	His	Ser	Glu
Ser Phe Thr Phe Proposition Leu Ser Gly Ser Ser Thr Ser Glu Ser Leu G25 Cur G25 Cur G20 Leu G30 G30 G30 G30 G30 G31 Cur G25 Cur G10 G10 G10 G10 G45 G20 G20 G40 G20 G40 G45 G46 G45 G45 G45 G46 G45 G46 G45 G46 G45 G46 G46 G45 G46 G47 G40 G40 G41 G41 <th< td=""><td></td><td></td><td></td><td></td><td></td><td>_</td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>						_		-							
Ser Phe Thr Phe Pro Leu Ser Gly Ser Thr Ser Glu Ser Glu Ser Leu Ala Leu Ala Ser Glu Ile Glu Glu Gly Gly <td>Arg</td> <td>Arg</td> <td>Pro</td> <td>Ser</td> <td>Gln</td> <td>Ser</td> <td>Ser</td> <td>Gln</td> <td>Val</td> <td>Ser</td> <td>Glu</td> <td>Gly</td> <td>Ser</td> <td>Leu</td> <td></td>	Arg	Arg	Pro	Ser	Gln	Ser	Ser	Gln	Val	Ser	Glu	Gly	Ser	Leu	
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Glu Ser Ser Lys Lys Asn Ala Leu Ala Ser Glu Glu Glu Asn Ala Leu Ala Ser Glu Ile Glu Met Lys Lys Glu Pro Thr Asp Ser Leu Glu Glu Glu Met Lys Lys Glu Pro Thr Asp Ser Leu Glu Asp Val Pro Asp Asp Ser Leu Glu Asp Val Pro Asp Asp <td>Ser</td> <td>Phe</td> <td>Thr</td> <td>Phe</td> <td></td> <td>Leu</td> <td>Ser</td> <td>Gly</td> <td>Ser</td> <td></td> <td>Thr</td> <td>Ser</td> <td>Glu</td> <td>Ser</td> <td></td>	Ser	Phe	Thr	Phe		Leu	Ser	Gly	Ser		Thr	Ser	Glu	Ser	
Leu Arg Thr Val Glu Met Lys Lys Gly Pro Thr Asp Ser Leu Gly Gly Gly Fro Thr Asp Ser Leu Gly Gly Gly Gly Ser Pro Gto Asp Val Pro Gfo Fro Leu Gly Asp Val Pro Gfo Fro Gfo Gfo Fro Gfo Gfo Gfo Fro Gfo Gfo <td></td> <td></td> <td>~</td> <td>0</td> <td></td> <td>7</td> <td>7</td> <td>70 70 70</td> <td>T 011</td> <td></td> <td>cor</td> <td>Clu</td> <td>Tla</td> <td>Gl n</td> <td></td>			~	0		7	7	70 70 70	T 011		cor	Clu	Tla	Gl n	
Leu	GIU	ser	Ser	ser		ьуѕ	ASII	Ата	цец		261	GIU	110	0111	
Ser Ser	Leu	Ara	Thr	Val		Met	Lvs	Lys	Gly		Thr	Asp	Ser	Leu	
See See							-4	-	-			_			
The Phe Ile Ala Met Met His Pro Thr Gly Val Ala Ala Gln Thr Gln Lys Leu Arg Val Gly Asp Arg Ile Val Thr Ile Cys Gly Thr 705	Ile	Ser	Ile	Ala	Gly	Gly	Val	Gly	Ser	Pro	Leu	Gly	Asp	Val	
680 14														~ 7	
Ser Thr Glu Gly Met Thr His Thr Thr Thr Thr Thr Tor Tor	Ile	Phe	Ile	Ala		Met	His	Pro	Thr		Val	Ala	Ala	GIn	
Ser Thr Glu Gly Met Thr His Thr Glu Ala Val Asn Leu Leu Lys Asn Ala Ser Gly Ser Ile Glu Met Gln Val Val Ala Gly Gly Asp Val Ser Gly Ser Ile Glu Met Glu Val Val Ala Gly Gly Asp Val Ser Val Val Met Glu Val Val Ala Gly Gly Asp Val Ser Val Val Glu Fro Ala Ser Ser Ser Ser Ser Ser Ser Ser Glu Pro Asp	~1 ~	T	T 011	7 ~~~		Gly	λαη	Ανσ	Tle		Thr	Tle	Cvs	Glv	
Ser Thr Glu Gly Met Thr His Thr Gln Gln Ala Val Asn Leu Leu Lya 720 Asn Ala Ser Gly Ser Ile Glu Met Gln Val Val Ala Gly Gly Asp 735 Val Ser Val Val Thr Gly His Gln Gln Gln Glu Pro Ala Ser Ser Ser 745 Leu Ser Phe Thr Gly Leu Thr Ser Ser Ile Phe Gln Asp 760 Leu Gly Pro Pro Gln Cys Lys Ser Ile Thr Leu Gly Pro Ala Ser Gly Pro Asp 765 Asp Gly Leu Gly Phe Ser Ile Val Gly Gly Tyr Gly Ser Pro His 795 Gly Asp Leu Pro Ile Tyr Val Lys Thr Val Phe Ala Lys Gly Ala	GIII	гуѕ	Leu	Arg		Gry	ASP	AT 9	110				C ₁ C	<i>0-1</i>	
Asn Ala Ser Gly Ser Ile Ser Ile Glu Met Sin Val Val Ala Gly Gly Asp Val Ser Val Val Thr Gly His Gln Glu Fro Ala Ser Ser Ser Leu Ser Phe Thr Gly Leu Thr Ser Ser Foot Toto Leu Gly Pro Gln Cys Leu Gly Ber Gln Glu Glu Fro Ala Ser Ser Foot Toto Leu Gly Pro Pro Gln Cys Lys Ser Ile Thr Leu Glu Arg Gly Pro Toto Asp Gly Leu Gly Pro Foot Toto Ser Ile Gly Gly Gly Tyr Gly Ser Pro His Toto Asp Gly Asp Leu Pro Ile Tyr Val Lys Thr Val Phe Ala Lys Gly Ala	Ser	Thr	Glu	Glv		Thr	His	Thr	Gln		Val	Asn	Leu	Leu	Lys
Val Ser Val Thr Gly His Gln Gln Glu Pro Ala Ser Ser Ser Ser Ser Jeu Ser Jeu J					710					715					720
Val Ser Val Thr Gly His Gln Gln Glu Pro Ala Ser Ser Ser Leu Ser Phe Thr Gly Leu Thr Ser Ser Ser Ile Phe Gln Asp Asp Leu Gly Pro Pro Gln Cys Lys Ser Ile Thr Leu Glu Arg Gly Pro Asp Gly Leu Gly Phe Ser Ile Val Gly Gly Tyr Gly Ser Pro His Asp Asp Leu Pro Ile Tyr Val Lys Thr Val Phe Ala Lys Gly Ala Lys Gly Ala Lys Gly Ala Lys Gly Phe Ala Lys Ala Lys Fine Ala Lys Gly Ala Lys Gly Phe Ala Lys Gly Ala Lys Gly Ala	Asn	Ala	Ser	Gly	Ser	Ile	Glu	Met	Gln		Val	Ala	Gly	Gly	
Leu Ser Phe Thr Gly Leu Thr Ser Ser Ser Ile Phe Gln Asp Asp Leu Gly Pro Gln Cys Lys Ser Ile Thr Leu Glu Asp Gly Pro Asp Gly Leu Gly Phe Ser Ile Val Gly Gly Tyr Gly Ser Pro His Gly Asp Leu Pro Ile Tyr Val Lys Thr Val Phe Ala Lys Gly Ala Lys Gly Ala						_					_		a	0	
Leu Ser Phe Thr Gly Leu Thr 755 Ser Ser Ser Ser Ile Phe Gln Asp Asp 765 Leu Gly Pro Pro Gln Cys Lys Ser Ile Thr Leu Glu Arg Gly Pro 770 780 Asp Gly Leu Gly Phe Ser Ile Val Gly Gly Tyr Gly Ser Pro 780 Gly Asp Leu Pro Ile Tyr Val Lys Thr Val Phe Ala Lys Gly Ala	Val	Ser	Val	Val		Gly	His	Gln	Gin		Pro	Ala	Ser	ser	
Leu Gly Pro Pro Gln Cys Lys Ser Ile Thr Leu Glu Arg Gly Pro 770 780 Asp Gly Leu Gly Phe Ser Ile Val Gly Gly Tyr Gly Ser Pro 780 Gly Asp Leu Pro Ile Tyr Val Lys Thr Val Phe Ala Lys Gly Asp	T 011	C 0 70	Dho	The		T 011	Thr	Sar	Sar		Tle	Phe	Gln	Asp	
Leu Gly Pro Pro Gln Cys Lys Ser Ile Thr Leu Glu Arg Gly Pro 780 Asp Gly Leu Gly Phe Ser Ile Val Gly Gly Tyr Gly Ser Pro His 785 785 790 795 795 Gly Asp Leu Pro Ile Tyr Val Lys Thr Val Phe Ala Lys Gly Ala	Leu	Ser	Pne	1111		пеп	1111	261	261		110	1110	0111	1100	765
Asp Gly Leu Gly Phe Ser Ile Val Gly Gly Tyr Gly Ser Pro His 785 Gly Asp Leu Pro Ile Tyr Val Lys Thr Val Phe Ala Lys Gly Ala	Leu	Glv	Pro	Pro		Cvs	Lys	Ser	Ile		Leu	Glu	Arg	Gly	
785 790 795 Gly Asp Leu Pro Ile Tyr Val Lys Thr Val Phe Ala Lys Gly Ala					770					775					780
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800 802 810	Gly	Asp	Leu	Pro		Tyr	Val	Lys	Thr		Phe	Ala	Lys	GLY	
Ale der die hen die hee toe toe hee die hen die Tie hie	n 7	C = :	~ 3	λ		7	1	T 320	7~~		Der	Gln	Tlo	Tla	
Ala Ser Glu Asp Gly Arg Leu Lys Arg Gly Asp Gln Ile Ile Ala 815 820 825	АТА	ser	GIU	Asp		Arg	Leu	пур	Arg		vəh	GIII	116		
Val Asn Gly Gln Ser Leu Glu Gly Val Thr His Glu Glu Ala Val	Va]	Asn	Glv	Gln		Leu	Glu	Gly	Val		His	Glu	Glu	Ala	
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His Pro Ser Asp Arg Met Gly Phe Pro Pro Gly Ala Ala Gln Ala
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Leu Val Leu Gln Val Phe Lys Thr Phe Asp His Met Ala Arg Gln
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Asp Asp Glu Lys Arg Arg Gln Glu Leu Glu Glu Lys Ile Arg Arg
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Lys Glu Glu Glu Ala Lys Thr Val Ser Ala Ala Ala Glu
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Lys Glu Pro Val Pro Val Gln Glu Ile Glu Ile Asp Ser
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                110
Thr Thr Glu Leu Asp Gly His Gln Glu Val Glu Lys Val Gln Pro
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 Pro Gly Pro Val Lys Glu Met Ala His Gly Ser Gln Glu Ala Glu
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Ala Pro Gly Ala Val Ala Gly Ala Ala Glu Val Pro Arg Glu Pro
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 Pro Ile Leu Pro Arg Ile Gln Glu Gln Phe Gln Lys Asn Pro Asp
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 Ser Tyr Asn Gly Ala Val Arg Glu Asn Tyr Thr Trp Ser Gln Asp
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 Tyr Thr Asp Leu Glu Val Arg Val Pro Val Pro Lys His Val Val
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                 200
 Lys Gly Lys Gln Val Ser Val Ala Leu Ser Ser Ser Ile Arg
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 Val Ala Met Leu Glu Glu Asn Gly Glu Arg Val Leu Met Glu Gly
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 Glu Pro Gly Lys Cys Val Leu Val Asn Leu Ser Lys Val Gly Glu
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 Tyr Trp Trp Asn Ala Ile Leu Glu Gly Glu Glu Pro Ile Asp Ile
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Leu Lys Lys Gly Trp Asp Ala Glu Gly Ser Pro Phe Arg Gly Gln
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Arg Arg Ser Gln Asp Gly Cys Pro Asp Gly Cys Ala Ser Leu Thr
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Ile Asn Arg Val Asp Pro Ser Glu Ser Leu Ser Ile Arg Leu Val
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Tyr Arg Asp Gly Val Ile Ala Arg Asp Gly Arg Leu Leu Pro Gly
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Trp	Leu	Thr	Val		Arg	Glu	Gln	Lys	Phe 265	Arg	Ser	Arg	Asn	Asn 270
Glv	Gln	Ala	Pro	260 Asp	Ala	Tyr	Arg	Pro		Asp	Asp	Ser	Phe	
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Val	Ile	Leu	Asn	Lys 290	Ser	Ser	Pro	Glu	Glu 295	Gln	Leu	Gly	Ile	Lys 300
T.e.11	Val	Ara	Lvs		Asp	Glu	Pro	Glv		Phe	Ile	Phe	Asn	Val
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Leu	Asp	Gly	Gly	Val	Ala	Tyr	Arg	His	Gly	Gln	Leu	Glu	Glu	Asn
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Asp	Arg	Val	Leu		Ile	Asn	Gly	His		Leu	Arg	Tyr	GIY	345
		_		335		•	~ 1.	~1 ~	340	Cox	Gl.	7 ~~	λνα	
Pro	Glu	Ser	Ala		HIS	Leu	Ile	GIII	355	ser	GIU	Arg	ALG	360
Uic	Lon	175]	Val	350 Ser	Δrα	Gln	Val	Ara		Ara	Ser	Pro	Asp	
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Phe	Gln	Glu	Ala		Trp	Asn	Ser	Asn	Gly	Ser	Trp	Ser	Pro	Gly
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Pro	Gly	Glu	Arg	Ser	Asn	Thr	Pro	Lys	Pro	Leu	His	Pro	Thr	Ile
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Thr	Cys	His	Glu		Val	Val	Asn	Ile		Lys	Asp	Pro	GIY	420
	.	01	850+	410	17-1	777	Gly	Glv	415 Ala	Ser	His	Ara	Glu	
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Δsn	Leu	Pro	Ile		Val	Ile	Ser	Val		Pro	Gly	Gly	Val	Ile
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_	_		3	470	Com	C 0 7	Ser	Tla	475	T.011	Lvg	Δla	Leu	
Leu	Leu	гÀг	Arg	485	ser	261	Ser	116	490	пец	цуо	1114	200	495
Val	Lvs	Glu	Tvr		Pro	Gln	Glu	Asp		Ser	Ser	Pro	Ala	Ala
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Leu	Asp	Ser	Asn	His	Asn	Met	Ala	Pro	Pro	Ser	Asp	Trp	Ser	Pro
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Ser	Trp	Val	Met		Leu	Glu	Leu	Pro		Cys	Leu	Tyr	Asn	540
	3	T1-	17-1	530	7 ~~	7 ~~	λen	Thr	535 ala	Glv	Ser	Leu	Glv	Phe
гÀз	Asp	ire	Val	545	AIG	Arg	ASII	1111	550	O y	501		1	555
Cvs	Tle	Val	Glv		Tvr	Glu	Glu	Tyr		Gly	Asn	Lys	Pro	Phe
Cyb			1	560	- 2			•	565	_				570
Phe	Ile	Lys	Ser	Ile	Val	Glu	Gly	Thr	Pro	Ala	Tyr	Asn	Asp	Gly
				575					580	_		<u>=</u>	_	585
Arg	Ile	Arg	Cys		Asp	Ile	Leu	Leu		Val	Asn	Gly	Arg	Ser
	_	-3		590	772 -	70 T -	C	T	595	7.~~	I ev	Len	Larg	600 Glu
Thr	Ser	Gly	Met		HlS	АТА	cys	ьeu	610	Arg	ьeu	nea	пåэ	Glu 615
τ	Tarc	G1 11	Δνα	605 Tle	Thr	Len	Thr	Πe		Ser	Trp	Pro	Glv	Thr
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Phe	Leu													

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                                      10
Lys Val Leu Asn His Ser Pro Met Ser Asp Ala Ser Val Asn Phe
                                      25
                 20
Asp Tyr Lys Ser Pro Ser Pro Phe Asp Cys Ser Thr Asp Gln Glu
                                      40
                 35
Glu Lys Ile Glu Asp Val Ala Ser His Cys Leu Pro Gln Lys Asp
                                      55
                 50
Leu Tyr Thr Ala Glu Glu Glu Ala Ala Thr Leu Phe Pro Arg Lys
                                      70
                 65
Met Thr Ser His Asn Gly Met Glu Asp Ser Gly Gly Gly Thr
                                      85
                 80
Gly Val Lys Lys Lys Lys Lys Lys Glu Pro Gly Asp Gln Glu
                                     100
                 95
Gly Ala Ala Lys Gly Ser Lys Asp Arg Glu Pro Lys Pro Lys Arg
                                     115
                110
Lys Arg Glu Pro Lys Glu Pro Lys Glu Pro Arg Lys Ala Lys Glu
                                     130
                125
Pro Lys Lys Ala Lys Glu His Lys Glu Pro Lys Gln Lys Asp Gly
                                     145
                140
Ala Lys Lys Ala Arg Lys Pro Arg Glu Ala Ser Gly Thr Lys Glu
                                     160
                155
Ala Lys Glu Lys Arg Ser Cys Thr Asp Ser Ala Ala Arg Thr Lys
                                     175
                170
Ser Arg Lys Ala Ser Lys Glu Gln Gly Pro Thr Pro Val Glu Lys
                                     190
                 185
Lys Lys Lys Gly Lys Arg Lys Ser Glu Thr Thr Val Glu Ser Leu
                                     205
                 200
Glu Leu Asp Gln Gly Leu Thr Asn Pro Ser Leu Arg Ser Pro Glu
                                     220
                215
Glu Ser Thr Glu Ser Thr Asp Ser Gln Lys Arg Arg Ser Gly Arg
                                     235
                 230
Gln Val Lys Arg Arg Lys Tyr Asn Glu Asp Leu Asp Phe Lys Val
                                     250
                 245
Val Asp Asp Gly Glu Thr Ile Ala Val Leu Gly Ala Gly Arg
                                     265
Thr Ser Ala Leu Ser Ala Ser Thr Leu Ala Trp Gln Ala Glu Glu
                 275
Pro Pro Glu Asp Asp Ala Asn Ile Ile Glu Lys Ile Leu Ala Ser
                                     295
                 290
 Lys Thr Val Gln Glu Val His Pro Gly Glu Pro Pro Phe Asp Leu
                                      310
                 305
 Glu Leu Phe Tyr Val Lys Tyr Arg Asn Phe Ser Tyr Leu His Cys
                                      325
                 320
 Lys Trp Ala Thr Met Glu Glu Leu Glu Lys Asp Pro Arg Ile Ala
```

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335
                                    340
Gln Lys Ile Lys Arg Phe Arg Asn Lys Gln Ala Gln Met Lys His
                                    355
Ile Phe Thr Glu Val Lys Gln Tyr Leu Leu Thr His Leu Thr Ala
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                365
Ala Phe Leu Ala Ala Val Asn Thr Val Phe Thr Phe Leu Ser Pro
                                    385
                380
Ser
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Gly Thr Ser Thr Ser Thr Pro Ala Ala Pro Thr Ala Arg Lys Gln
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Leu Asp Lys Glu Gln Val Arg Lys Ala Val Asp Ala Leu Leu Thr
                                     40
His Cys Lys Ser Arg Lys Asn Asn Tyr Gly Leu Leu Asn Glu
                                     55
Asn Glu Ser Leu Phe Leu Met Val Val Leu Trp Lys Ile Pro Ser
                                     70
Lys Glu Leu Arg Val Arg Leu Thr Leu Pro His Ser Ile Arg Ser
Asp Ser Glu Asp Ile Cys Leu Phe Thr Lys Asp Glu Pro Asn Ser
                                    100
Thr Pro Glu Lys Thr Glu Gln Phe Tyr Arg Lys Leu Leu Asn Lys
                110
                                    115
His Gly Ile Lys Thr Val Ser Gln Ile Ile Ser Leu Gln Thr Leu
                125
                                    130
Lys Lys Glu Tyr Lys Ser Tyr Glu Ala Lys Leu Arg Leu Leu Ser
                                    145
Ser Phe Asp Phe Phe Leu Thr Asp Ala Arg Ile Arg Arg Leu Leu
                                    160
                155
Pro Ser Leu Ile Gly Arg His Phe Tyr Gln Arg Lys Lys Val Pro
                170
                                    175
Val Ser Val Asn Leu Leu Ser Lys Asn Leu Ser Arg Glu Ile Asn
                                    190
                185
Asp Cys Ile Gly Gly Thr Val Leu Asn Ile Ser Lys Ser Gly Ser
                200
                                    205
Cys Ser Ala Ile Arg Ile Gly His Val Gly Met Gln Ile Glu His
Ile Ile Glu Asn Ile Val Ala Val Thr Lys Gly Leu Ser Glu Lys
                230
                                    235
Leu Pro Glu Lys Trp Glu Ser Val Lys Leu Leu Phe Val Lys Thr
                                    250
                245
Glu Lys Ser Ala Ala Leu Pro Ile Phe Ser Ser Phe Val Ser Asn
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265
                260
Trp Asp Glu Ala Thr Lys Arg Ser Leu Leu Asn Lys Lys Lys
                                    280
                275
Glu Ala Arg Arg Lys Arg Arg Glu Arg Asn Phe Glu Lys Gln Lys
                                    295
                290
Glu Arg Lys Lys Lys Arg Gln Gln Ala Arg Lys Thr Ala Ser Val
                                    310
                305
Leu Ser Lys Asp Asp Val Ala Pro Glu Ser Gly Asp Thr Thr Val
                                    325
                320
Lys Lys Pro Glu Ser Lys Lys Glu Gln Thr Pro Glu His Gly Lys
                                    340
                335
Lys Lys Arg Gly Arg Gly Lys Ala Gln Val Lys Ala Thr Asn Glu
                                    355
                350
Ser Glu Asp Glu Ile Pro Gln Leu Val Pro Ile Gly Lys Lys Thr
                                    370
                365
Pro Ala Asn Glu Lys Val Glu Ile Gln Lys His Ala Thr Gly Lys
                                    385
                380
Lys Ser Pro Ala Lys Ser Pro Asn Pro Ser Thr Pro Arg Gly Lys
                395
Lys Arg Lys Ala Leu Pro Ala Ser Glu Thr Pro Lys Ala Ala Glu
                410
                                    415
Ser Glu Thr Pro Gly Lys Ser Pro Glu Lys Lys Pro Lys Ile Lys
                                    430
                425
Glu Glu Ala Val Lys Glu Lys Ser Pro Ser Leu Gly Lys Lys Asp
                                    445
                440
Ala Arg Gln Thr Pro Lys Lys Pro Glu Ala Lys Phe Phe Thr Thr
                                    460
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Pro Ser Lys Ser Val Arg Lys Ala Ser His Thr Pro Lys Lys Trp
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Pro Lys Lys Pro Lys Val Pro Gln Ser Thr
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Met Met Val Met Val Val Ile Thr Cys Leu Leu Ser His Tyr
                                     25
Lys Leu Ser Ala Arg Ser Phe Ile Ser Arg His Ser Gln Gly Arg
                                     40
                 35
Arg Arg Glu Asp Ala Leu Ser Ser Glu Gly Cys Leu Trp Pro Ser
                                     55
                 50
Glu Ser Thr Val Ser Gly Asn Gly Ile Pro Glu Pro Gln Val Tyr
                                     70
                 65
Ala Pro Pro Arg Pro Thr Asp Arg Leu Ala Val Pro Pro Phe Ala
                 80
```

```
Gln Arg Glu Arg Phe His Arg Phe Gln Pro Thr Tyr Pro Tyr Leu
                                    100
Gln His Glu Ile Asp Leu Pro Pro Thr Ile Ser Leu Ser Asp Gly
                110
                                    115
Glu Glu Pro Pro Pro Tyr Gln Gly Pro Cys Thr Leu Gln Leu Arg
                125
                                    130
Asp Pro Glu Gln Gln Leu Glu Leu Asn Arg Glu Ser Val Arg Ala
                                    145
Pro Pro Asn Arg Thr Ile Phe Asp Ser Asp Leu Met Asp Ser Ala
                                    160
Arg Leu Gly Gly Pro Cys Pro Pro Ser Ser Asn Ser Gly Ile Ser
                                    175
                170
Ala Thr Cys Tyr Gly Ser Gly Gly Arg Met Glu Gly Pro Pro Pro
                185
                                    190
Thr Tyr Ser Glu Val Ile Gly His Tyr Pro Gly Ser Ser Phe Gln
                                    205
                200
His Gln Gln Ser Ser Gly Pro Pro Ser Leu Leu Glu Gly Thr Arg
                                    220
                215
Leu His His Thr His Ile Ala Pro Leu Glu Ser Ala Ala Ile Trp
Ser Lys Glu Lys Asp Lys Gln Lys Gly His Pro Leu
                245
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Met Glu Ser Ala Arg Glu Asn Ile Asp Leu Gln Pro Gly Ser Ser
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Asp Pro Arg Ser Gln Pro Ile Asn Leu Asn His Tyr Ala Thr Lys
                                     25
Lys Ser Val Ala Glu Ser Met Leu Asp Val Ala Leu Phe Met Ser
                                     40
                 35
Asn Ala Met Arg Leu Lys Ala Val Leu Glu Gln Gly Pro Ser Ser
                                     55
                 50
His Tyr Tyr Thr Thr Leu Val Thr Leu Ile Ser Leu Ser Leu Leu
                 65
Leu Gln Val Val Ile Gly Val Leu Leu Val Val Ile Ala Arg Leu
                                     85
Asn Leu Asn Glu Val Glu Lys Gln Trp Arg Leu Asn Gln Leu Asn
                                    100
Asn Gly Ser His Ile Leu Val Phe Phe Thr Val Val Ile Asn Gly
                                    115
Phe Ile Thr Gly Phe Gly Ala His Lys Thr Arg Val Leu Ala Cys
                                    130
                                                         135
                125
Gln Asp Ser Arg Asn Pro Leu
                140
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Met Glu Ile Ile Glu Asn Ser Phe His Ile Asn Gly Leu Lys Ile
                                     10
Asn Gln Arg Thr Leu Cys Val His Val Cys Ile Ser Ala His Arg
                                     25
                 20
Asn Ile Tyr Thr Tyr Val Asp Tyr Ile His Val Cys Ile Tyr Val
                                     40
                 35
Tyr Ile Tyr Ile His Leu Tyr Lys Cys Ile Tyr Thr Tyr Thr Tyr
Asn Val Cys Met Cys Ile Tyr
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Met Phe Gln Phe His Ala Gly Ser Trp Glu Ser Trp Cys Cys
                                     10
Cys Leu Ile Pro Ala Asp Arg Pro Trp Asp Arg Gly Gln His Trp
                                     25
Gln Leu Glu Met Ala Asp Thr Arg Ser Val His Glu Thr Arg Phe
Glu Ala Ala Val Lys Val Ile Gln Ser Leu Pro Lys Asn Gly Ser
                                     55
                 50
Phe Gln Pro Thr Asn Glu Met Met Leu Lys Phe Tyr Ser Phe Tyr
                                     70
                 65
Lys Gln Ala Thr Glu Gly Pro Cys Lys Leu Ser Arg Pro Gly Phe
                 80
Trp Asp Pro Ile Gly Arg Tyr Lys Trp Asp Ala Trp Ser Ser Leu
                                    100
Gly Asp Met Thr Lys Glu Glu Ala Met Ile Ala Tyr Val Glu Glu
                110
Met Lys Lys Ile Ile Glu Thr Met Pro Met Thr Glu Lys Val Glu
                                    130
Glu Leu Leu Arg Val Ile Gly Pro Phe Tyr Glu Ile Val Glu Asp
                140
                                    145
Lys Lys Ser Gly Arg Ser Ser Asp Ile Thr Ser Asp Leu Gly Asn
```

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160
                155
Val Leu Thr Ser Thr Pro Asn Ala Lys Thr Val Asn Gly Lys Ala
                                    175
Glu Ser Ser Asp Ser Gly Ala Glu Ser Glu Glu Glu Glu Ala Gln
                                     190
                185
Glu Glu Val Lys Gly Ala Glu Gln Ser Asp Asn Asp Ile Asn Asp
                200
                                    205
Asp His Val Glu Asp Val Thr Gly Ile Gln His Leu Thr Ser Asp
                215
                                    220
Ser Asp Ser Glu Val Tyr Cys Asp Ser Met Glu Gln Phe Gly Gln
                                    235
Glu Glu Ser Leu Asp Ser Phe Thr Ser Asn Asn Gly Pro Phe Gln
                                     250
Tyr Tyr Leu Gly Gly His Ser Ser Gln Pro Met Glu Asn Ser Gly
                260
                                    265
Phe Arg Glu Asp Ile Gln Val Pro Pro Gly Asn Gly Asn Ile Gly
                                    280
                275
Asn Met Gln Val Val Ala Val Glu Gly Lys Gly Glu Val Lys His
                290
                                    295
Gly Gly Glu Asp Gly Arg Asn Asn Ser Gly Ala Pro His Arg Glu
                                    310
Lys Arg Gly Gly Glu Thr Asp Glu Phe Ser Asn Val Arg Arg Gly
                                     325
                320
Arg Gly His Arg Met Gln His Leu Ser Glu Gly Thr Lys Gly Arg
                                    340
                335
Gln Val Gly Ser Gly Gly Asp Gly Glu Arg Trp Gly Ser Asp Arg
                                    355
                350
Gly Ser Arg Gly Ser Leu Asn Glu Gln Ile Ala Leu Val Leu Met
                                    370
Arg Leu Gln Glu Asp Met Gln Asn Val Leu Gln Arg Leu Gln Lys
                                    385
Leu Glu Thr Leu Thr Ala Leu Gln Ala Lys Ser Ser Thr Ser Thr
                395
                                    400
Leu Gln Thr Ala Pro Gln Pro Thr Ser Gln Arg Pro Ser Trp Trp
                410
                                    415
Pro Phe Glu Met Ser Pro Gly Val Leu Thr Phe Ala Ile Ile Trp
                                    430
                425
Pro Phe Ile Ala Gln Trp Leu Val Tyr Leu Tyr Tyr Gln Arg Arg
                                    445
Arg Arg Lys Leu Asn
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                                     10
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Leu Tyr Leu Val Ile Cys Gly Gln Asp Asp Gly Pro Pro Gly Ser
Glu Asp Pro Glu Arg Asp Asp His Glu Gly Gln Pro Arg Pro Arg
                                     40
Val Pro Arg Lys Arg Gly His Ile Ser Pro Lys Ser Arg Pro Met
                                     55
Ala Asn Ser Thr Leu Leu Gly Leu Leu Ala Pro Thr Gly Glu Ala
                                     70
                 65
Trp Gly Ile Leu Gly Gln Pro Pro Asn Arg Pro Asn His Ser Pro
Pro Pro Ser Ala Lys Val Lys Lys Ile Phe Gly Trp Gly Asp Phe
                                    100
                 95
Tyr Ser Asn Ile Lys Thr Val Ala Leu Asn Leu Leu Val Thr Gly
                                    115
                110
Lys Ile Val Asp His Gly Asn Gly Thr Phe Ser Val His Phe Gln
                125
                                    130
His Asn Ala Thr Gly Gln Gly Asn Ile Ser Ile Ser Leu Val Pro
                                    145
                140
Pro Ser Lys Ala Val Glu Phe His Gln Glu Gln Gln Ile Phe Ile
                155
Glu Ala Lys Ala Ser Lys Ile Phe Asn Cys Arg Met Glu Trp Glu
                                    175
                170
Lys Val Glu Arg Gly Arg Arg Thr Ser Leu Cys Thr His Asp Pro
                                    190
                185
Ala Lys Ile Cys Ser Arg Asp His Ala Gln Ser Ser Ala Thr Trp
                                    205
                200
Ser Cys Ser Gln Pro Phe Lys Val Val Cys Val Tyr Ile Ala Phe
                215
Tyr Ser Thr Asp Tyr Arg Leu Val Gln Lys Val Cys Pro Asp Tyr
                230
Asn Tyr His Ser Asp Thr Pro Tyr Tyr Pro Ser Gly
                                    250
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Lys Val Pro Gln Val Thr Thr Glu Ala Lys Val Pro Pro Ala Ala
Asp Gly Lys Ala Pro Leu Thr Lys Pro Ser Lys Lys Glu Ala Pro
                 35
                                     40
Ala Glu Lys Gln Gln Pro Pro Ala Ala Pro Thr Thr Ala Pro Ala
                                     55
                 50
Lys Lys Thr Ser Ala Lys Ala Asp Pro Ala Leu Leu Asn Asn His
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70

Ser Asn Leu Lys Pro Ala Pro Thr Val Pro Ser Ser Pro Asp Ala

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85
                 80
Thr Pro Glu Pro Lys Gly Pro Gly Asp Gly Ala Glu Glu Asp Glu
                                   100
                 95
Ala Ala Ser Gly Gly Pro Gly Gly Arg Gly Pro Trp Ser Cys Glu
                110
                                   115
Asn Phe Asn Pro Leu Leu Val Ala Gly Gly Val Ala Val Ala Ala
                                    130
                125
Ile Ala Leu Ile Leu Gly Val Ala Phe Leu Val Arg Lys Lys
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Ser Val Glu Asp Gly Lys Trp Tyr Gly Val Arg Ser Tyr Leu His
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Leu Phe Tyr Glu Asp Cys Ala Gly Thr Ala Leu Ser Asp Asp Pro
Glu Gly Pro Pro Val Leu Cys Pro Arg Arg Pro Trp Pro Ser Leu
Cys Trp Lys Ile Ser Leu Ser Ser Gly Thr Leu Leu Leu Leu
                                     70
                65
Gly Val Ala Ala Leu Thr Thr Gly Tyr Ala Val Pro Pro Lys Leu
                                     85
                 80
Glu Gly Ile Gly Glu Gly Glu Phe Leu Val Leu Asp Gln Arg Ala
                                    100
                 95
Ala Asp Tyr Asn Gln Ala Leu Gly Thr Cys Arg Leu Ala Gly Thr
                110
Ala Leu Cys Val Ala Ala Gly Val Leu Leu Ala Ile Cys Leu Phe
Trp Ala Met Ile Gly Trp Leu Ser Gln Asp Thr Lys Ala Glu Pro
                                   145
Leu Asp Pro Glu Ala Asp Ser His Val Glu Val Phe Gly Asp Glu
                                   160
                155
Pro Glu Gln Gln Leu Ser Pro Ile Phe Arg Asn Ala Ser Gly Gln
                                   175
                170
Ser Trp Phe Ser Pro Pro Ala Ser Pro Phe Gly Gln Ser Ser Val
                                    190
                185
Gln Thr Ile Gln Pro Lys Arg Asp Ser
                200
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Lys His Lys Asn Leu Phe Leu Asn Tyr Arg Asn Leu His His Phe
Pro Leu Glu Leu Leu Lys Asp Glu Gly Leu Gln Tyr Leu Glu Arg
Leu Tyr Met Lys Arg Asn Ser Leu Thr Ser Leu Pro Glu Asn Leu
                                     55
                 50
Ala Gln Lys Leu Pro Asn Leu Val Glu Leu Tyr Leu His Ser Asn
                 65
                                     70
Asn Ile Val Val Pro Glu Ala Ile Gly Ser Leu Val Lys Leu
                                     85
Gln Cys Leu Asp Leu Ser Asp Asn Ala Leu Glu Ile Val Cys Pro
                                    100
Glu Ile Gly Arg Leu Arg Ala Leu Arg His Leu Arg Leu Ala Asn
                                    115
                110
Asn Gln Leu Gln Phe Leu Pro Pro Glu Val Gly Asp Leu Lys Glu
                                    130
                125
Leu Gln Thr Leu Asp Ile Ser Thr Asn Arg Leu Leu Thr Leu Pro
                                    145
                140
Glu Arg Leu His Met Cys Leu Ser Leu Gln Tyr Leu Thr Val Asp
                                    160
                155
Arg Asn Arg Leu Trp Tyr Val Pro Arg His Leu Cys Gln Leu Pro
                                    175
                170
Ser Leu Asn Glu Leu Ser Met Ala Gly Asn Arg Leu Ala Phe Leu
                                    190
                185
Pro Leu Asp Leu Gly Arg Ser Arg Glu Leu Gln Tyr Val Tyr Val
                                    205
                200
Asp Asn Asn Ile His Leu Lys Gly Leu Pro Ser Tyr Leu Tyr Asn
                                    220
                215
Lys Val Ile Gly Cys Ser Gly Cys Gly Ala Pro Ile Gln Val Ser
                                    235
                230
Glu Val Lys Leu Leu Ser Phe Ser Ser Gly Gln Arg Thr Val Phe
                245
Leu Pro Ala Glu Val Lys Ala Ile Gly Thr Glu His Asp His Val
                                    265
                260
Leu Pro Leu Gln Glu Leu Ala Met Arg Gly Leu Tyr His Thr Tyr
                275
                                    280
His Ser Leu Leu Lys Asp Leu Asn Phe Leu Ser Pro Ile Ser Leu
                                    295
Pro Arg Ser Leu Leu Glu Leu Leu His Cys Pro Leu Gly His Cys
                                    310
His Arg Cys Ser Glu Pro Met Phe Thr Ile Val Tyr Pro Lys Leu
                                    325
                320
Phe Pro Leu Arg Glu Thr Pro Met Ala Gly Leu His Gln Trp Lys
                                    340
                335
Thr Thr Val Ser Phe Val Ala Tyr Cys Cys Ser Thr Gln Cys Leu
                                                         360
                                    355
                350
Gln Thr Phe Asp Leu Leu Ser
                365
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Glu Lys Gly Asn Val Leu Leu Glu Asp Gly Lys Gly Arg Cys Pro
Phe Asp Pro Asn Phe Lys Ser Thr Ala Leu Val Val Asp Gly Glu
                 35
Leu Tyr Thr Gly Thr Val Ser Ser Phe Gln Gly Asn Asp Pro Ala
                                     55
                 50
Ile Ser Arg Ser Gln Ser Leu Arg Pro Thr Lys Thr Glu Ser Ser
                                      70
                 65
Leu Asn Trp Leu Gln Asp Pro Ala Phe Val Ala Ser Ala Tyr Ile
                                      85
Pro Glu Ser Leu Gly Ser Leu Gln Gly Asp Asp Asp Lys Ile Tyr
                                     100
Phe Phe Phe Ser Glu Thr Gly Gln Glu Phe Glu Phe Glu Asn
                                     115
                110
Thr Ile Val Ser Arg Ile Ala Arg Ile Cys Lys Gly Asp Glu Gly
                                     130
                125
Gly Glu Arg Val Leu Gln Gln Arg Trp Thr Ser Phe Leu Lys Ala
                140
                                     145
Gln Leu Leu Cys Ser Arg Pro Asp Asp Gly Phe Pro Phe Asn Val
                                     160
Leu Gln Asp Val Phe Thr Leu Ser Pro Ser Pro Gln Asp Trp Arg
                                     175
Asp Thr Leu Phe Tyr Gly Val Phe Thr Ser Gln Trp His Arg Gly
                                     190
                185
Thr Thr Glu Gly Ser Ala Val Cys Val Phe Thr Met Lys Asp Val
                                    205
                200
Gln Arg Val Phe Ser Gly Leu Tyr Lys Glu Val Asn Arg Glu Thr
                                     220
                 215
Gln Gln Trp Tyr Thr Val Thr His Pro Val Pro Thr Pro Arg Pro
                                     235
                 230
Gly Ala Cys Ile Thr Asn Ser Ala Arg Glu Arg Lys Ile Asn Ser
                 245
                                     250
Ser Leu Gln Leu Pro Asp Arg Val Leu Asn Phe Leu Lys Asp His
                260
                                     265
Phe Leu Met Asp Gly Gln Val Arg Ser Arg Met Leu Leu Leu Gln
                                     280
                 275
Pro Gln Ala Arg Tyr Gln Arg Val Ala Val His Arg Val Pro Gly
                                     295
Leu His His Thr Tyr Asp Val Leu Phe Leu Gly Thr Gly Asp Gly
                                     310
                 305
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Arg	Leu	His	Lys	Ala 320	Val	Ser	Val	Gly	Pro 325	Arg	Val	His	Ile	Ile 330
Glu	Glu	Leu	Gln		Phe	Ser	Ser	Gly		Pro	Val	Gln	Asn	
				335					340					345
Leu	Leu	Asp	Thr	His	Arg	Gly	Leu	Leu	Tyr	Ala	Ala	Ser	His	Ser
		-		350	_	-			355					360
Glv	Val	Val	Gln	Val	Pro	Met	Ala	Asn	Cys	Ser	Leu	Tyr	Arg	Ser
•				365					370					375
Cys	Gly	Asp	Cys	Leu	Leu	Ala	Arg	Asp	Pro	Tyr	Cys	Ala	Trp	Ser
•	•	-	•	380					385					390
Gly	Ser	Ser	Cys	Lys	His	Val	Ser	Leu	Tyr	Gln	Pro	Gln	Leu	Ala
•			_	395					400					405
Thr	Arg	Pro	Trp	Ile	Gln	Asp	Ile	Glu	Gly	Ala	Ser	Ala	Lys	Asp
				410					415					420
Leu	Cys	Ser	Ala	Ser	Ser	Val	Val	Ser	Pro	Ser	Phe	Val	Pro	Thr
				425					430					435
Gly	Glu	Lys	Pro	Cys	Glu	Gln	Val	Gln	Phe	Gln	Pro	Asn	Thr	Val
				440					445					450
Asn	Thr	Leu	Ala	Cys	Pro	Leu	Leu	Ser	Asn	Leu	Ala	Thr	Arg	Leu
				455					460					465
Trp	Leu	Arg	Asn	Gly	Ala	Pro	Val	Asn	Ala	Ser	Ala	Ser	Cys	His
				470					475					480
Val	Leu	Pro	Thr	Gly	Asp	Leu	Leu	Leu	Val	Gly	Thr	Gln	Gln	Leu
				485					490					495
Gly	Glu	Phe	Gln	Cys	Trp	Ser	Leu	Glu	Glu	Gly	Phe	Gln	Gln	
				500					505					510
Val	Ala	Ser	Tyr	Cys	Pro	Glu	Val	Val		Asp	Gly	Val	Ala	
				515					520	_	_			525
Gln	Thr	Asp	Glu		Gly	Ser	Val	Pro		Ile	Ile	Ser	Thr	
				530					535	_	_	~1		540
Arg	Val	Ser	Ala		Ala	Gly	GIY	Lys		Ser	Trp	Gly	Ala	
_	_	_	_	545				,	550	0	ml	T	Db -	555
Arg	Ser	Tyr	Trp	_	GIU	Pne	Leu	vai		Cys	Thr	ьeu	Pne	570
+	21-	17-3	7	560	D	77-7	T 011	Dho	565	Ť ON	Tyr	7 ~~	uic	
Leu	Ald	vai	Leu	575	PIO	vai	Leu	PHE	580	neu	I Y L	Arg	1112	585
λan	cor	Mot	Lvc		Dho	T 011	Tuc	G3 n		Glu	Cys	Δla	Ser	
ASII	261	Mec	БУS	590	FIIC	пеа	Буз	0111	595	014	Cys		501	600
Hic	Dro	Lve	Thr		Pro	Val	Val	Len		Pro	Glu	Thr	Ara	
111.5	110	<i></i> y		605	110	Vul	, u		610				5	615
Len	Asn	Glv	Leu		Pro	Pro	Ser	Thr		Leu	Asp	His	Ara	
200		U -1		620					625				5	630
Tvr	Gln	Ser	Leu		Asp	Ser	Pro	Pro		Ser	Arg	Val	Phe	
- /	· · · ·			635	710 P				640					645
Glu	Ser	Glu	Lys		Pro	Leu	Ser	Ile		Asp	Ser	Phe	Val	
			•	650					655	•				660
Val	Ser	Pro	Val	Cys	Pro	Arg	Pro	Arg	Val	Arg	Leu	Gly	Ser	Glu
				665		_		-	670	_		-		675
Ile	Arg	Asp	Ser	Val	Val									
	-	-		680										

29/53

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